

Date: Thursday, 12/20/2007 3:23:26 PM
 User: Kim Johnston

Process Sheet

5

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : HELI ACCESS STEP EXT HIGH GEAR
 Job Number : 36494
 Estimate Number : 13072
 P.O. Number :
 This Issue : 12/20/2007 S.O. No. :
 Prsht Rev. : NC Part Number : D205633023
 First Issue : / / Type : LARGE FAB ASSY Drawing Number : DSI 9300 REV B
 Previous Run : 35868 Drawing Revision : B
 Material :
 Due Date : 1/27/2008 Qty: 3 Um: Each
 Written By :
 Checked & Approved By :
 Comment : Est Rev: A new issue Rev B dwg 07-11-19 DD verified by: EC

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	DC	DOCUMENT CONTROL



(3)

Comment: DOCUMENT CONTROL

Photocopy bluefile & type labels per PPPD205-633-023 CHG001

5 08/03/06

2.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

3.0

D2022101

Spacer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 12.0000 Each(s)

Spacer

Batch: 33985

4.0

D2022103

Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 6.0000 Each(s)

Spacer

Batch: 1335885

5.0

D2562013

Strut



Comment: Qty.: 1.0000 Each(s)/Unit Total : 3.0000 Each(s)

Strut

Batch: 36511 2p B 3636514

12/8/07 (3)

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng		Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 12/20/2007 3:23:26 PM

User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: HELI ACCESS STEP EXT HIGH GEAR

Job Number: 36494

Part Number: D205633023

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

D2563

Step Weldment Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 3.0000 Each(s)

Weldment Assembly

Batch: 36512

JP 8/3/6

(3x)

7.0

D2565201

Strut



Comment: Qty.: 1.0000 Each(s)/Unit Total : 3.0000 Each(s)

Strut

Batch: 36514 B36514

8.0

D2565203

Strut



Comment: Qty.: 1.0000 Each(s)/Unit Total : 3.0000 Each(s)

Strut

Batch: 36513 36513

9.0

D2565205

Strut



Comment: Qty.: 1.0000 Each(s)/Unit Total : 3.0000 Each(s)

Strut

Batch: 36515

10.0

D2565207

Strut



Comment: Qty.: 1.0000 Each(s)/Unit Total : 3.0000 Each(s)

Strut

Batch: 36516

11.0

D2565209

Strut



Comment: Qty.: 1.0000 Each(s)/Unit Total : 3.0000 Each(s)

Strut

Batch: 36517

12.0

D3437043

Aft Strut Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 3.0000 Each(s)

Aft Strut Assembly

Batch: B36524

PC 8/3/7 (3)

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng		Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 12/20/2007 3:23:26 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: HELI ACCESS STEP EXT HIGH GEAR

Job Number: 36494

Part Number: D205633023

Job Number:



Seq. #:

Machine Or Operation:

Description :

13.0

AN45A

Bolt



Comment: Qty.: 1.0000 Each(s)/Unit Total : 3.0000 Each(s)

Bolt

Batch:

M100857 28

10 M106242 RO -

14.0

AN46A

Bolt



Comment: Qty.: 3.0000 Each(s)/Unit Total : 9.0000 Each(s)

Bolt

Batch:

M105810

RV

15.0

AN47A

Bolt



Comment: Qty.: 1.0000 Each(s)/Unit Total : 3.0000 Each(s)

Bolt

Batch:

M102190

RV

16.0

AN412A

Bolt



Comment: Qty.: 1.0000 Each(s)/Unit Total : 3.0000 Each(s)

Bolt

Batch:

M105143

RV

17.0

AN414A

Bolt



Comment: Qty.: 1.0000 Each(s)/Unit Total : 3.0000 Each(s)

Bolt

Batch:

M105653

RV

18.0

AN44 7A

EYEBOLT



Comment: Qty.: 1.0000 Each(s)/Unit Total : 3.0000 Each(s)

EYEBOLT

Batch:

M106763

*****ENSURE THIS IS AN44-7A EYEBOLT*****

RV

19.0

AN514A

Bolt



Comment: Qty.: 1.0000 Each(s)/Unit Total : 3.0000 Each(s)

Bolt

Batch:

M104847

RV 8/3/4 (3)

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: LS Date: 01/23/06
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

Date: Thursday, 12/20/2007 3:23:26 PM

User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: HELI ACCESS STEP EXT HIGH GEAR

Job Number: 36494

Part Number: D205633023

Job Number:



Seq. #:

Machine Or Operation:

Description :

20.0

AN960JD416

Washer



Comment: Qty.: 14.0000 Each(s)/Unit Total : 42.0000 Each(s)

Washer

Batch: M106277

21.0

AN960JD516

Washer



Comment: Qty.: 3.0000 Each(s)/Unit Total : 9.0000 Each(s)

Washer

Batch: M108654

22.0

MS21042L4

Nut



Comment: Qty.: 7.0000 Each(s)/Unit Total : 21.0000 Each(s)

Nut

Batch: M105938

23.0

MS21042L5

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total : 6.0000 Each(s)

Nut

Batch: M106277

24.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

25.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D205-633-023

Location:

PPP Rev:

Draft

26.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



2008/3/06

(3)

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector



Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng		Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED 	APPROVED 	DRAWING NO. DSI 9300	REV. B SHEET 1 OF 6
DATE 05.08.12		TITLE SIMPLEX TANK STEP	SCALE NTS
A	05.05.05	NEW ISSUE	
B	05.08.12	ADD STRUTS IF TANK REMOVED	

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D205-633 REV. A

REF. CANADIAN STC: SH96-57

REF. FAA STC: SR00592NY, SR00593NY, SR00594NY

THE PURPOSE OF THIS SERVICE INSTRUCTION IS TO ADD THE D205-633-021/-022/-023/-024/-025/-026 STEPS TO ADDRESS COMPATABILITY WITH THE SIMPLEX MODEL 304 FIRE ATTACK TANK. D205-633-021/-022 ARE IDENTICAL TO D205-633-011, EXCEPT AS SHOWN HERE. D205-633-023/-024 ARE IDENTICAL TO D205-633-013, EXCEPT AS SHOWN HERE. D205-633-025/-026 ARE IDENTICAL TO D205-633-015, EXCEPT AS SHOWN HERE.

NOTE THAT THE STRUTS REQUIRED TO INSTALL THE STEPS ON THE LOWER AFT HARDPOINT HAVE ALSO BEEN INCLUDED WITH THE KITS IN CASE THE TANK IS REMOVED FOR ANY REASON. THESE STRUTS SHOULD BE INSTALLED I.A.W. IIN-D205-633, EXCEPT REPLACE EYEBOLT WITH AN4 BOLT ON LOWER HARDPOINT. ALSO NOTE THAT IF THE THREADS PROTRUDE THROUGH THE BAR ON THE D3437-XXX STRUT ASSEMBLIES AFTER ADJUSTMENT THEY MAY BE TRIMMED OFF.

WEIGHT AND BALANCE

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D205-633-021 <i>HELI-ACCESS-STEP™</i>	14.0 lb 6.35 kg	-50.0 in -1.27 m	-700 in lb -8.06 m kg	94.5 in 2.40 m	1323 in lb 15.24 m kg
D205-633-022 <i>HELI-ACCESS-STEP™</i>	13.2 lb 6.00 kg	+50.0 in +1.27 m	+660 in lb +7.62 m kg	94.5 in 2.40 m	1247 in lb 14.40 m kg
D205-633-023 <i>HELI-ACCESS-STEP™</i>	14.3 lb 6.50 kg	-50.0 in -1.27 m	-715 in lb -8.26 m kg	94.5 in 2.40 m	1351 in lb 15.6 m kg
D205-633-024 <i>HELI-ACCESS-STEP™</i>	13.5 lb 6.14 kg	+50.0 in +1.27 m	+675 in lb +7.80 m kg	94.5 in 2.40 m	1276 in lb 14.74 m kg
D205-633-025 <i>HELI-ACCESS-STEP™</i>	14.6 lb 6.64 kg	-50.0 in -1.27 m	-730 in-lb -8.43 m-k-g	94.5 in 2.40 m	1380 in-lb 15.94 m-k-g
D205-633-026 <i>HELI-ACCESS-STEP™</i>	13.8 lb 6.27 kg	+50.0 in +1.27 m	+690 in-lb +7.96 m-k-g	94.5 in 2.40 m	1304 in-lb 15.05 m-k-g

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NO. 36494

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED



BY: 
D. SHEPHERD (DE # 02)

DATE: 05.08.12
CERT. NO.: SH96-57
ISSUE NO.: #5

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DART

DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED 	APPROVED 	DRAWING NO. DSI 9300	REV. B SHEET 2 OF 6
DATE 05.08.12		TITLE SIMPLEX TANK STEP	SCALE NTS

PARTS LIST

QTY -021	QTY -022	QTY -023	QTY -024	QTY -025	QTY -026	Part Number	Description
X						D205-633-021	Hell-Access-Step™ (LH), High Gear
	X					D205-633-022	Hell-Access-Step™ (RH), High Gear
		X				D205-633-023	Hell-Access-Step™ (LH), Extended High Gear (31")
			X			D205-633-024	Hell-Access-Step™ (RH), Extended High Gear (31")
				X		D205-633-025	Hell-Access-Step™ (LH), Extended High Gear (39")
					X	D205-633-026	Hell-Access-Step™ (RH), Extended High Gear (39")
4	4	4	4	4	4	D2022-101	SPACER
2	2	2	2	2	2	D2022-103	SPACER
				1	1	D2562-005	STRUT
1	1					D2562-011	STRUT
		1	1			D2562-013	STRUT
1		1		1		D2563	WELDMENT ASSEMBLY
				*1	*1	D3165-1	STRUT
1	1					D2565-101	STRUT
1	1					D2565-103	STRUT
1	1					D2565-105	STRUT
1	1					D2565-107	STRUT
1	1					D2565-109	STRUT
*1	*1					D2565-111	STRUT
		1	1			D2565-201	STRUT
		1	1			D2565-203	STRUT
		1	1			D2565-205	STRUT
		1	1			D2565-207	STRUT
		1	1			D2565-209	STRUT
		*1	*1			D2565-211	STRUT
				1	1	D2565-301	STRUT
				1	1	D2565-303	STRUT
				1	1	D2565-305	STRUT
				1	1	D2565-307	STRUT
				1	1	D2565-309	STRUT
1	1					D3437-041	AFT STRUT ASSEMBLY
		1	1			D3437-043	AFT STRUT ASSEMBLY
				1	1	D3437-045	AFT STRUT ASSEMBLY
	1		1		1	D3438-042	WELDMENT ASSEMBLY
1	1	1	1	1	1	AN4-5A	BOLT
4	4	3	3	3	3	AN4-6A	BOLT
1	1	1	1	1	1	AN4-7A	BOLT
1	1					AN4-11A	BOLT
		1	1	1	1	AN4-12A	BOLT
1	1	1	1	1	1	AN4-14A	BOLT
1	1	1	1	1	1	AN44-7A	EYEBOLT
1	1	1	1	1	1	AN5-14A	BOLT
16	16	14	14	14	14	AN960JD416	WASHER
3	3	3	3	3	3	AN960JD516	WASHER
8	8	7	7	7	7	MS21042L4	NUT (or MS21042-4)
2	2	2	2	2	2	MS21042L5	NUT (or MS21042-5)

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CANADA
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AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)



DATE: 05.08.12
CERT. NO.: SH96-57
ISSUE NO.: #5

* ONLY INSTALLED IF TANK IS REMOVED

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DART

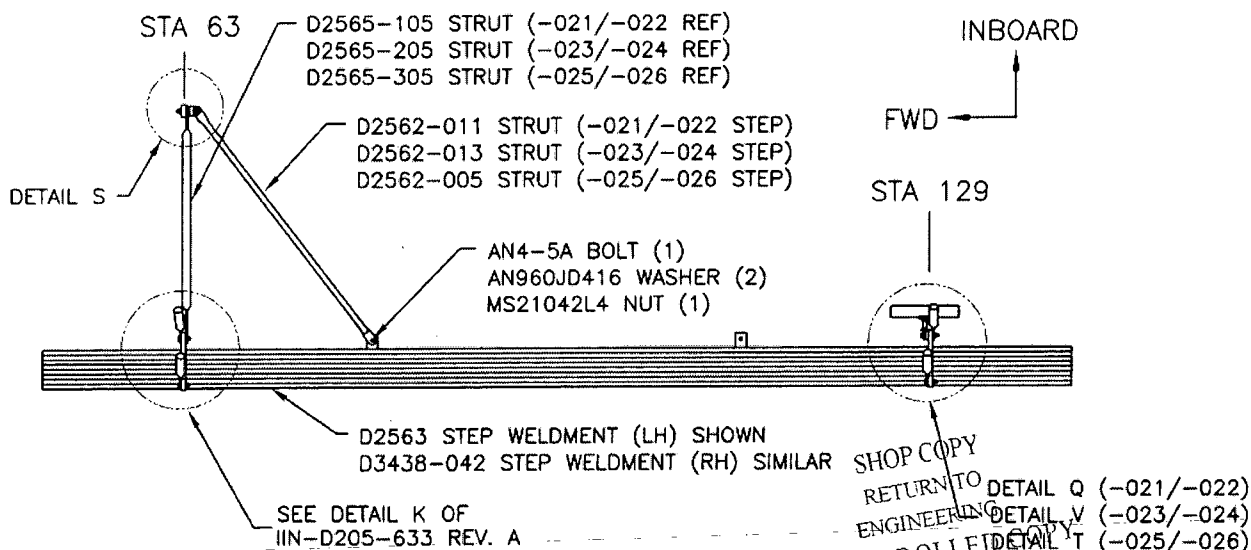
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CHECKED 	APPROVED 	DRAWING NO. DSI 9300	REV. B 3 OF 6
DATE 05.08.12	TITLE SIMPLEX TANK STEP KIT		SCALE NTS

INSTALLATION OF D205-633-021/-022/-023/-024/-025/-026

INSTALL D205-633-021/-022 AS PER THE D205-633-011 STEP OF INSTALLATION INSTRUCTIONS IIN-D205-633 REV.A, EXCEPT REPLACE D2565-111 STRUT WITH THE D3437-041 AFT STRUT ASS'Y, REMOVE D2562-001 STRUT, INSTALL D2562-011 STRUT AS SHOWN.

INSTALL D205-633-023/-024 AS PER THE D205-633-013 STEP OF INSTALLATION INSTRUCTIONS IIN-D205-633 REV.A, EXCEPT REPLACE D2565-211 STRUT WITH THE D3437-043 AFT STRUT ASS'Y, REMOVE D2562-003 STRUT, INSTALL D2562-013 STRUT AS SHOWN.

INSTALL D205-633-025/-026 AS PER THE D205-633-015 STEP OF INSTALLATION INSTRUCTIONS IIN-D205-633 REV.A, EXCEPT REPLACE D3165-1 SUPPORT ARM WITH THE D3437-045 AFT STRUT ASS'Y AS SHOWN.

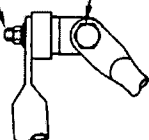


D205-633-021/-023/-025 SHOWN.
D205-633-022/-024/-026 SIMILAR
(VIEW LOOKING DOWN)

AN44-7A EYEBOLT (1)
AN960JD516 WASHER (1)
MS21042L5 NUT (1)

AN4-6A BOLT (1)
AN960JD416 WASHER (2)
MS21042L4 NUT (1)

DETAIL S
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BRANCH
DAO # 01-O-01

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D. SHEPHERD (DE # 02)

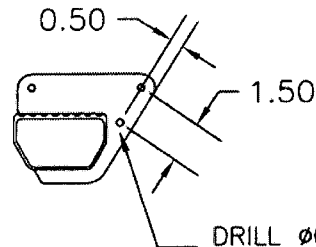
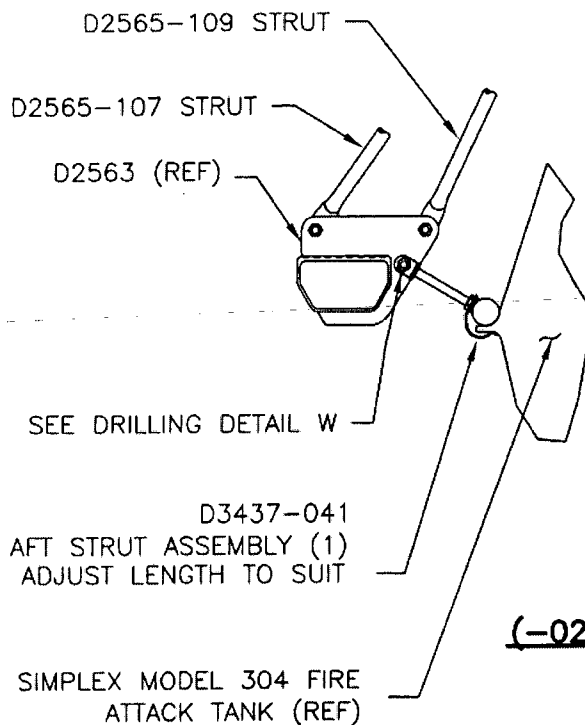
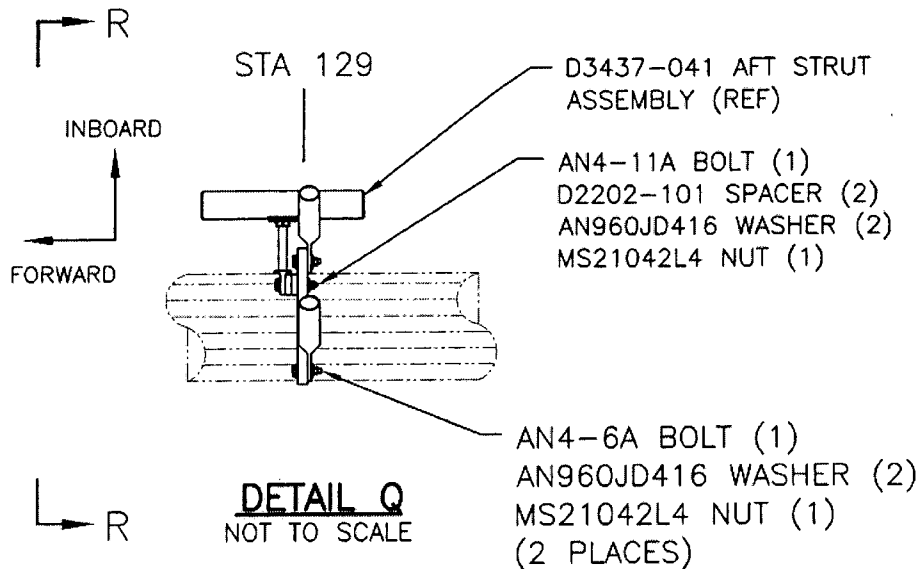
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DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED 	APPROVED 	DRAWING NO. DSI 9300	REV. B SHEET 4 OF 6
DATE 05.08.12		TITLE SIMPLEX TANK STEP	SCALE NTS

**DETAIL W**

DRILL $\varnothing 0.257$ THRU,
TOUCH UP WITH
ALODINE 1200 OR 1201
PER MIL-C-5541 AS SHOWN

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(-021/-022 STEP)

VIEW R-R
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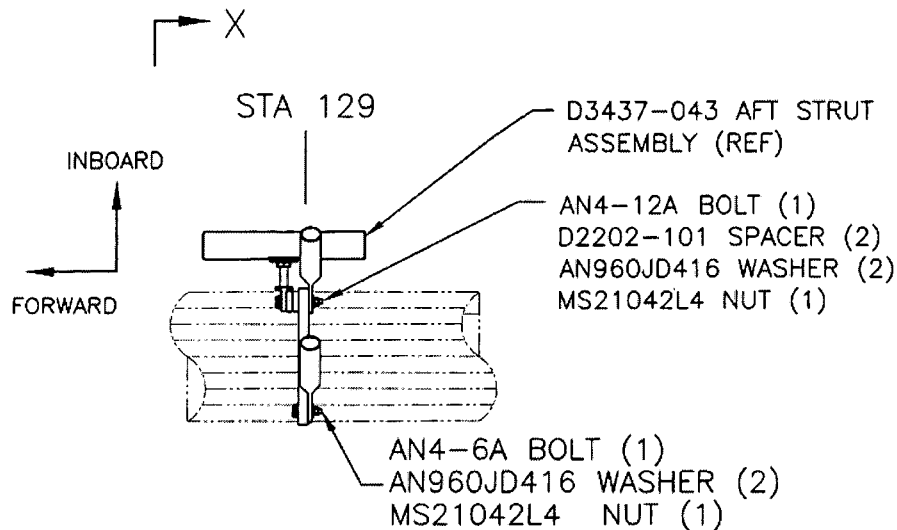
CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH DAO # 01-O-01	
APPROVED 	
BY:	D. SHEPHERD (DE # 02)
DATE:	05.08.12
CERT. NO.:	SH96-57
ISSUE NO.:	#5

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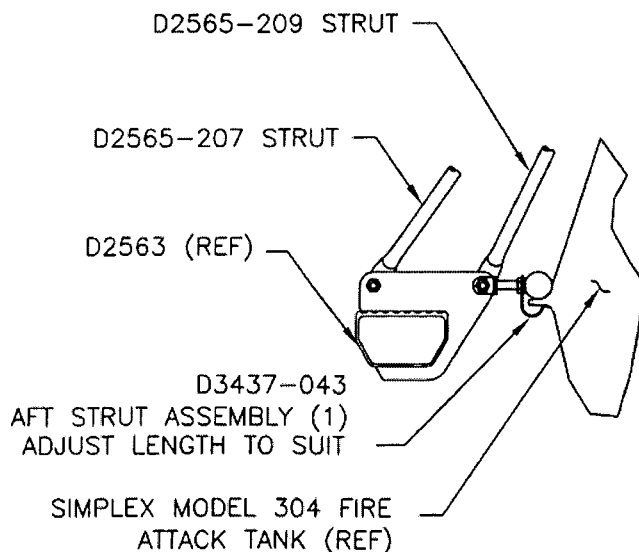
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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. DSI 9300	REV. B SHEET 5 OF 6
DATE 05.08.12		TITLE SIMPLEX TANK STEP	SCALE NTS



DETAIL V
NOT TO SCALE



(-023/-024 STEP)

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NOT TO SCALE

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WORKLOADER
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CANADA
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BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

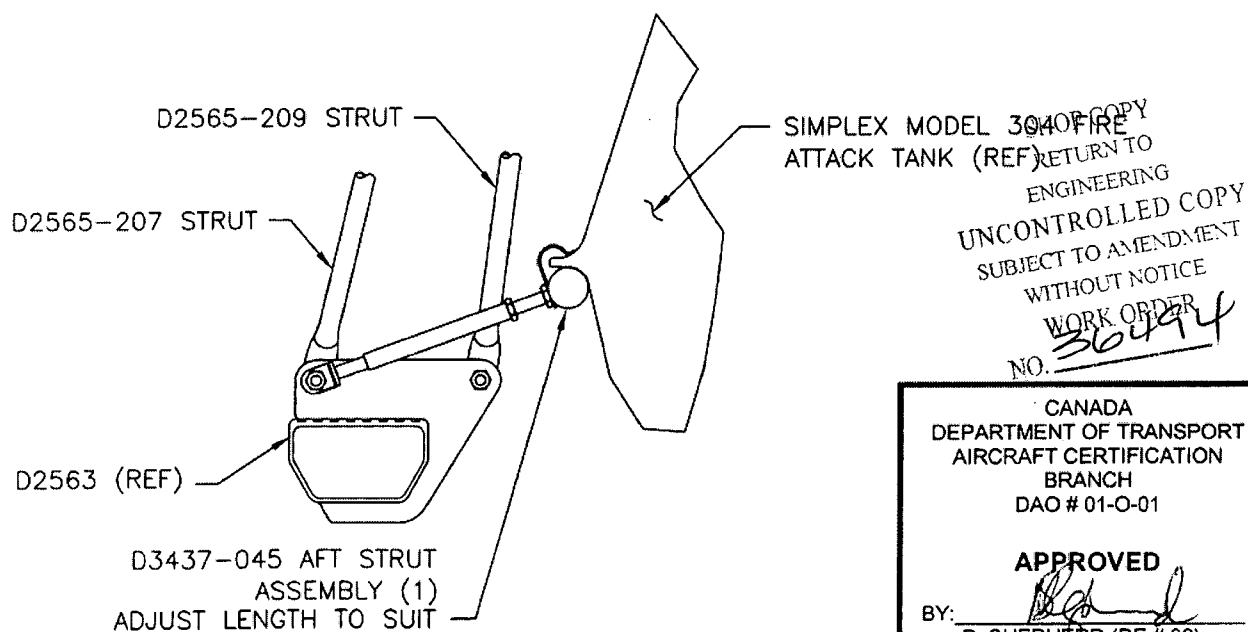
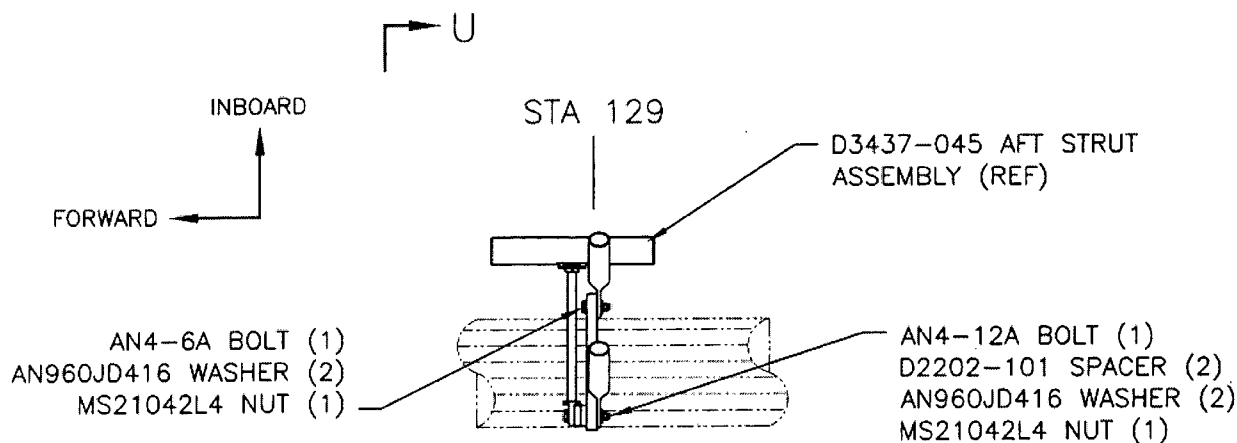
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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. DSI 9300	REV. B SHEET 6 OF 6
DATE 05.08.12		TITLE SIMPLEX TANK STEP	SCALE NTS



VIEW U-U
NOT TO SCALE

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

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